

Public Health Committee Public Hearing

March 19, 2014

Testimony on Raised Bill 438
An Act Concerning Certification of Stroke Centers

Good afternoon Senator Gerratana, Representative Johnson and distinguished members of the Public Health Committee. My name is Timothy Parsons, MD and I am here today to ask for your support for **Senate Bill 438, An Act Concerning Certification of Stroke Centers.**

I am a Neurologist and I have been the medical director of The Hospital of Central Connecticut's stroke center since July 2010. I started my medical training almost 14 years ago and since that time I have seen how stroke is approached in many different hospitals and healthcare settings, both as a physician and as a family member of multiple stroke victims.

Stroke is common and devastating. I can confidently say from both a personal and professional perspective that there is an alarming lack of standardization in how stroke is diagnosed and managed in Connecticut and the nation as a whole. Long gone are the days when the best treatment available to acute stroke patients was an aspirin and admission to the hospital to be evaluated by a neurologist the next day. The contemporary approach rightfully treats stroke as an emergency, in which the goal is to salvage as much brain tissue as possible before it is irreversibly damaged and functional abilities are lost.

It has been calculated that roughly 2 million neurons are lost *per minute* during an ischemic stroke.¹

Despite the life-changing consequences and potential reversibility of stroke, approaching it as a treatable emergency is unfortunately not as widespread as was expected when acute therapies were developed in the 1990's. Even in institutions that have an interest in administering these brain-saving therapies, the process for actually doing so quickly may not be optimal, for various reasons. This translates into lost brain tissue and more disability.

Tissue plasminogen activator (known as TPA) is an FDA approved therapy for breaking up blood clots and reducing disability after stroke. The time window to give it is short. Based on a large study published in the Lancet, the chance of achieving a good outcome is **doubled** when patients receive TPA in the first 2 hours after stroke symptoms start. This benefit quickly drops to **zero** by 4.5 hours.² Many patients cannot receive it at all after 3 hours have passed. Not every stroke patient is a good candidate for this therapy and there are serious risks associated with its use. Selecting the right patients in a rapid manner can be very challenging.

I think it is clear that anyone interested in the brain health of their friends, family, and neighbors would like this therapy to be given quickly and by a capable team when it is needed.

Admission to specialized stroke units has been shown to increase use of TPA. Furthermore, stroke units have been demonstrated to lower post-stroke mortality as well³, mainly through differences in nursing care and attention to preventing post-stroke complications. Simply put, stroke centers save lives.

It is hard to argue that this level of care should not be standardized across the state and country. It is not easy in any hospital but it is achievable. The difficulties inherent in building and maintaining this level of care in a hospital or ED are enough that independent oversight is required, as it is for other special medical conditions like ST Elevation heart attacks or trauma.

Unfortunately, since Connecticut DPH stopped certifying stroke centers in 2013, only 16 of Connecticut's 30 hospital locations are currently certified in stroke care by an independent body. This leaves a substantial fraction of CT citizens too distant from a hospital that can prove its ability to treat stroke effectively. Without oversight, standardization will suffer, evidence-based therapies may or may not be given, and too many patients will not achieve their best possible outcome.

All stroke patients deserve outstanding care. Nobody deserves less than the standard of care. Please vote for a state-wide stroke care system that Connecticut can be proud of.

Sincerely,

Timothy C. Parsons, MD

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References:

1. Stroke 2006; 37: 263-266
2. Lancet 2004; 363: 768-74
3. JAMA 2011; 305(4): 373-380